

STATE OF MINNESOTA  
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY

Proposed Rules Relating  
to Ammonia Piping and  
Installation Standards,  
JUDGE

REPORT OF THE CHIEF  
ADMINISTRATIVE LAW

Minn. Rules Parts  
5230.5000 - 5230.6200

The above-entitled matter came on for review by the Chief  
Administrative  
Law Judge pursuant to the provisions of Minn. Stat. 14.15, subds. 3 and  
4,  
which provide:

Subd. 3. Finding of substantial change. If the  
[administrative law judge's] report contains a finding that a  
rule has been modified in a way which makes it substantially  
different from that which was originally proposed, or that the  
agency has not met the requirements of sections 14.131 to 14.18,  
it shall be submitted to the chief administrative law judge for  
approval. If the chief administrative law judge approves the  
finding of the administrative law judge, the chief  
administrative law judge shall advise the agency and the revisor  
of statutes of actions which will correct the defects. The  
agency shall not adopt the rule until the chief administrative  
law judge determines that the defects have been corrected.

Subd. 4. Need or reasonableness not established. If the  
chief administrative law judge determines that the need for or  
reasonableness of the rule has not been established pursuant to  
section 14.14, subdivision 2, and if the agency does not elect  
to follow the suggested actions of the chief administrative law  
judge to correct that defect, then the agency shall submit the  
proposed rule to the legislative commission to review  
administrative rules for the commission's advice and comment.  
The agency shall not adopt the rule until it has received and  
considered the advice of the commission. However, the agency is  
not required to delay adoption longer than 30 days after the  
commission has received the agency's submission. Advice of the  
commission shall not be binding on the agency.

Based upon a review of the record in this proceeding, the Chief  
Administrative Law Judge hereby approves the Report of the Administrative Law  
Judge in all respects.

In order to correct the defects enumerated by the Administrative Law Judge, the agency shall either take the action recommended by the Administrative Law Judge or reconvene the rule hearing if appropriate. If the agency chooses to reconvene the rule hearing, it shall do so as if it is initiating a new rule hearing, complying with all substantive and procedural requirements imposed on the agency by law or rule.

If the agency chooses to take the action recommended by the Administrative Law Judge, it shall submit to the Chief Administrative Law Judge a copy of the rules as initially published in the State Register, a copy of the rules as proposed for final adoption in the form required by the State Register for final publication, and a copy of the agency's Findings of Fact and Order Adopting Rules. The Chief Administrative Law Judge will then make a determination as to whether the defects have been corrected and whether the modifications in the rules are substantial changes.

Should the agency make changes in the rules other than those recommended by the Administrative Law Judge, it shall also submit the complete record to the Chief Administrative Law Judge for a review on the issue of substantial change.

Dated: July 20, 1992,

WILLIAM G BROWN  
Chief Administrative Law Judge

STATE OF MINNESOTA  
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY

Proposed Rules Relating  
to Ammonia Piping and  
Installation Standards,  
JUDGE  
Minn. Rules Parts  
5230.5000 - 5230.6200

REPORT OF THE  
ADMINISTRATIVE LAW

The above-entitled matter came on for a public hearing before Administrative Law Judge Peter C. Erickson, from the Minnesota Office of Administrative Hearings, commencing at 9:00 a.m. on June 3, 1992, at the State Office Building in St. Paul, Minnesota, and continued until all interested persons had an opportunity to participate by asking questions and presenting oral and written comments.

This Report is part of a rule hearing procedure required by Minn. Stat. 14.131 - 14.20 (1991), to determine whether the proposed rules governing standards for ammonia refrigeration systems should be adopted by the Department of Labor and Industry (Department or Agency). Members of the panel appearing at the hearing included: B. James Berg, Director of Code Administration and Inspection Services, Department of Labor and Industry, and Kathryn Berger, Staff Attorney, Department of Labor and Industry, 443 Lafayette Road, St. Paul, Minnesota 55155. Steve Buffington, Special Assistant Attorney General, Suite 200, 520 Lafayette Road, St. Paul, Minnesota 55155, appeared as attorney on behalf of the Department.

Ten members of the public signed the hearing register at the hearing and five members of the public provided oral comments. At the hearing, the Department submitted Dpt. Ex. A through M as its jurisdictional documents. It also submitted Dpt. Ex. N at the hearing. That exhibit proposed several amendments to the rules. Those proposed amendments and several additional amendments were also submitted by the Board to the Administrative Law Judge in a timely post-hearing comment dated June 8, 1992, received by the Administrative Law Judge on June 9, 1992. In addition to the Department exhibits, the Administrative Law Judge, during the comment period, received timely comments from Grand Metropolitan, Carlson & Stewart Refrigeration, Setter, Leach & Lindstrom, Inc., International Union of Operating Engineers, Local Union No. 70, William V. Richards, Inc., the International Institute of Ammonia Refrigeration, Hormel Co., Bassett Mechanical Contractors and Engineers, and Palen/Kimball Company. The Department also filed an initial comment on the public testimony, proposed amendments to the rules and, on

June 16, 1992, a detailed response to public comments. The record of this proceeding closed for all purposes on June 17, 1992.

The Department must wait at least five working days before taking any final action on the rules; during that period, this Report must be made available to all interested persons upon request.

Pursuant to the provisions of Minn. Stat. 14.15, subd 3 and 4, this

Report has been submitted to the Chief Administrative Law Judge for his approval. If the Chief Administrative Law Judge approves the adverse findings

of this Report, he will advise the Department of actions which will correct the defects and the Department may not adopt the rule until the Chief Administrative Law Judge determines that the defects have been corrected. However, in those instances where the Chief Administrative Law Judge identifies defects which relate to the issues of need or reasonableness, the Department may either adopt the Chief Administrative Law Judge's suggested actions to cure the defects or, in the alternative, if the Department does not

elect to adopt the suggested actions, it must submit the proposed rule to the

Legislative Commission to Review Administrative Rules for the Commission's advice and comment.

If the Department elects to adopt the suggested actions of the Chief Administrative Law Judge and makes no other changes and the Chief Administrative Law Judge determines that the defects have been corrected, then

the Department may proceed to adopt the rule and submit it to the Revisor of Statutes for a review of the form. If the Department makes changes in the rule other than those suggested by the Administrative Law Judge and the Chief

Administrative Law Judge, then it shall submit the rule, with the complete record, to the Chief Administrative Law Judge for a review of the changes before adopting it and submitting it to the Revisor of Statutes.

When the Department files the rule with the Secretary of State, it shall

give notice on the day of filing to all persons who requested that they be informed of the filing.

Based upon all the testimony, exhibits and written comments, the Administrative Law Judge makes the following:

#### FINDINGS OF FACT

##### Procedural Requirements

1. On April 12, 1992, the Department filed the following documents with the Chief Administrative Law Judge:

(a) A copy of the proposed rules certified by the Revisor of Statutes.

(b) The Order for Hearing.

(c) The Notice of Hearing proposed to be issued.

(d) A Statement of the number of persons expected to attend the hearing

and estimated length of the Agency's presentation.

(e) The Statement of Need and Reasonableness.

(f) A Statement of Additional Notice.

2 . On April 2, 1992, a Notice of Hearing and a copy of the proposed rules were published at 16 State Register No. 43, pp. 2273 - 2307

3 . On April 17, 1992, the Department mailed the Notice of Hearing to all persons and associations who had registered their names with the Department for the purpose of receiving such notice. On the same day, the Department also mailed a Notice of Hearing to persons on the discretionary mailing list.

That list included individuals and companies associated with the ammonia piping industry in Minnesota.

4. On May 8, 1992, the Department filed the following documents with the Administrative Law Judge:

- (a) The Notice of Hearing as mailed.
- (b) The Agency's certification that its mailing list was accurate and complete.
- (c) The Affidavit of Mailing the Notice to all persons on the Agency's list.
- (d) An Affidavit of Additional Notice.
- (e) The names of Department personnel who will represent the Agency at the hearing together with the names of any other witnesses solicited by the Agency to appear on its behalf.
- (f) A copy of the State Register containing the proposed rules.
- (g) All materials received following a Notice of Intent to Solicit Outside Opinion published at 13 State Register p. 2935, and a copy of the Notice.

The documents were available for inspection at the Office of Administrative Hearings from the date of filing to the date of the hearing.

The 25 requests for the holding of a public hearing were submitted to the Administrative Law Judge at the hearing herein and are contained in the record as Dpt. Ex. 1.

5. The initial period for submission of written comment and statements remained open through June 10, 1992. The record finally closed on June 17, 1992, the fifth business day following the close of the initial comment period.

6. In its comments of June 10, 1992, pp. 4-5, the International Institute of Ammonia Refrigeration asserts that appropriate notice and comment was not afforded on the proposed rules to affected members of the ammonia refrigeration industry. A similar statement is contained in the comments of Bassett Mechanical Contractors and Engineers, dated June 10, 1992, p. 3. Both commentators state that the text of the rules was not published in the State Register, but only that such rules would be provided upon request. Dpt. Ex. H shows that the full text of the rules was published in the State Register of April 20, 1992, as stated in Finding 2, supra. The Agency, in providing notice of the hearing to affected members of the public, has not only followed

the minimal requirements of Minn. Stat. 14.131 - 14.20 (1991), it has exceeded those requirements by providing additional, discretionary notice.

#### Statutory Authority

7. The Department's statutory authority to adopt rules regarding ammonia refrigeration systems is contained in Minn. Stat. 326.46, 326.461, subd. 2 (1990). The statutory sections cited specifically include within the definition of high pressure piping, systems of ammonia piping and require the Department to prescribe minimum uniform standards. Since the definition of a rule contained in Minn. Stat. 14.02, subd. 4 (1990), requires that any agency statement of general applicability making specific the law enforced or administered by the agency be adopted as a rule under the Minnesota



Administrative Procedure Act, the statutory sections relied upon by the Department clearly authorize the adoption of the proposed rules.

#### Small Business Considerations

8. Complying with the proposed rules of the Department relating to the installation of ammonia refrigeration systems will have some unquantified monetary impact on small businesses, as defined by Minn. Stat. 14.115 (1990). In its Statement of Need and Reasonableness, the Department states that it considered the impact of the proposed rules on small businesses and concluded that none of the factors identified in Minn. Stat. 14.115, subd. 2(a)-(e) (1990), justify any less stringent standards for ammonia contractors who are small businesses. This is the case because the rules address safety issues formulated in the form of performance standards. The safety of the public and workers who will come in contact with the systems dictate that the same level of regulation apply to all installers of refrigeration equipment, irrespective of the size of the contracting firm. Statement of Need and Reasonableness, p. 3. The Administrative law judge finds that the Department has correctly determined that accommodation in the performance standards for small businesses is not feasible since the adverse effect on safety concerns would render such an accommodation contrary to the statutory objectives of the agency in promulgating the rules. Minn. Stat. 326.46, 326.461 (1990); Minn. Stat. 14.115, subd. 3 (1990).

9. Minn. Stat. 14.115, subd. 4 (1990), also requires the Department to encourage the participation of small businesses, as defined in Minn. Stat.

14.115, subd. 1 (1990), in rulemaking proceedings. The Agency has complied with Minn. Stat. 14.115, subd. 4 (1990), by including in the Notice of Hearing for this rulemaking proceeding a statement that the rule will have some unquantified qualitative and quantitative impact on small businesses. The Agency has, therefore, fully complied with the requirements of Minn. Stat.

14.115, subd. 2, 14.115, subd. 3 and 14.115, subd. 4 (1990).

#### Nature of Proposed Rules

10. The Department of Labor and Industry is required by Minn. Stat. 326.46 (1990) to supervise all "high pressure piping" used on all projects in the State and is given the authority to prescribe uniform minimum standards governing such "high pressure piping". In 1989, Laws of 1989 c. 22, 1, the legislature included ammonia piping within the definition of "high pressure piping" contained in Minn. Stat. 326.461, subd. 2 (1990). Ammonia piping is installed for purposes of refrigeration. Beginning in 1989, the Agency began developing a code of uniform minimum standards for the installation of ammonia piping in Minnesota. It solicited comment from affected members of the industry in 1989, 1990 and 1992. It also appointed an industry task force which reviewed the applicable national standard codes and prepared a first

draft set of rules. The Department engaged an independent contractor to review and edit the draft prepared by the task force. The draft prepared by the independent contractor was then mailed to over 60 of the Department's constituents who are active in the design and installation of ammonia systems. A number of industry representatives commented on the draft rules circulated by the Department.

The draft rules set minimum standards for the installation and use of ammonia refrigeration systems in Minnesota. The primary source documents used to develop the proposed rules were: American National Standards Institute/International Institute of Ammonia Refrigeration (ANSI/IIAR) 74-2 (1978), EQUIPMENT, DESIGN AND INSTALLATION OF AMMONIA MECHANICAL REFRIGERATION SYSTEMS; 1989 American Society of Mechanical Engineers (ASME), American National Standards Institute Standard B 31.5, REFRIGERATION PIPING; and 1990 American National Standards Institute/American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc. (ANSI/ASHRAE) HANDBOOK ON REFRIGERATION SYSTEMS AND APPLICATIONS. Portions of the applicable documents were incorporated verbatim into the rules and other portions were reworded or clarified. In addition, the proposed rules, in some instances, contain requirements which differ from or exceed the requirements of the source documents. The Agency restated portions of the national standards rather than merely include references so that the rules would be as complete as possible and include the text of the requirements in one document.

11. A number of commentators argued that it is inappropriate for the Department to formulate Minnesota-specific rules regarding the installation and use of ammonia refrigeration systems. In their mind, national specifications and codes are appropriate for use in Minnesota. The creation of Minnesota-specific rules, with differing or more stringent requirements, is argued to be anti-competitive and an unreasonable limitation on national firms who install ammonia refrigeration systems in all parts of the country. See, e.g., Comments of Grand Metropolitan, June 8, 1992, pp. 1-2, 3; Comments of William V. Richards, Inc., June 9, 1992, p. 1; Comments of the International Institute of Ammonia Refrigeration, June 10, 1992, pp. 2-3, p. 10; Comments of Hormel Company, June 10, 1992, p. 1. The Department has, however, given maximum consideration to uniformity by drawing on and incorporating major portions of the national standards as the source documents for the proposed rules. The national codes are not per se appropriate for implementation as rules, as defined in Minn. Stat. 14.02 (1990), without reformulation and statement in mandatory language. Comment of the Department of Labor and Industry, June 10, 1992, p. 1; Tr. 55-58. Moreover, the statute imposes on the Department the responsibility for prescribing rules relating to the installation and use of ammonia refrigeration piping systems in the State of Minnesota. In no respect can the development of such a safety code for the protection of residents of the State of Minnesota be considered as anticompetitive or beyond the authority of the State, so long as the requirements are needed and reasonable. The Department has also stated that it will consider further implementation of the national codes in the rules and/or their incorporation by reference in the future when amendments to these rules are considered. Reply Comments of the Department, June 12, 1992, pp. 4-5. The Administrative Law Judge finds that the Department has statutory authority to promulgate uniform rules in the State of Minnesota for the installation and operation of ammonia piping refrigeration installations. The Agency may adopt national standards, if it chooses to do so and it considers

those standards sufficient to protect Minnesota residents. To the extent that

it desires to deviate from such national standards, it has the same burden of proving need and reasonableness it would have in promulgating any rule under Minn. Stat. 14.14, subd. 2 (1990).

## Modifications to the Proposed Rules Made by the Department

12. At the hearing and during the period for receipt of written comments, the Department proposed modifications to the proposed rules which are intended to clarify the purpose and intent of the rules and respond to issues that were raised by the public. Those modifications are set forth in Exhibit A, attached hereto. Except as may be specifically set forth in later Findings, the Administrative Law Judge finds the reasonableness of the modifications stated in Exhibit A have been demonstrated and none of the changes constitutes a prohibited substantial change from the rules initially proposed within the meaning of Minn. Stat. 14.15, subd. 3 (1990).

## Discussion of the Proposed Rules

13. Many of the proposed rule provisions received no specific negative public comment and were adequately supported by the Statement of Need and Reasonableness. The Administrative Law Judge will not specifically address those rules in the Findings hereinafter made. The need for and reasonableness of those provisions has been demonstrated by an affirmative presentation of fact in the record,

14. Part 5230.5010 incorporates by reference stated technical documents issued by the Society of Mechanical Engineers, the American Welding Society, the American National Standards Institute and the American Society for Testing and Materials. These documents are appropriate for incorporation by reference in that they are subject to frequent change and are available through the Minitex Interlibrary Loan System. The Revisor of Statutes certified that the documents are conveniently available to the public. Minn. Stat. 14.07, subd. 4 (1990).

15. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 5, argues that additional documents should be incorporated by reference. The Department, in its Reply Comments of June 12, 1992, states that it will consider adopting ASHRAE and IIAR Codes by reference when rulemaking changes are considered sometime in the future. The Department states that it did rely on at least two of the additional documents that the Institute wishes to incorporate by reference. Statement of Need and Reasonableness, p. 1. The Department, however, did not merely adopt in toto the language of those documents. Pertinent parts were included in the rules verbatim while others were rephrased for clarification. The Department has experience with the results of the application of ASHRE-15 (1978 edition). It is satisfied that it provides an appropriate degree of protection. No such extended experience exists yet under the 1989 edition of ASHRE-15. The

In order for an agency to meet the burden of proving reasonableness, it must demonstrate by a presentation of facts that the rule is rationally

related to the end sought to be achieved. *Broen Memorial Home v. Minnesota Department of Human Services*, 364 N.W.2d 436, 440 (Minn. App. 1985). Those facts may be either adjudicative facts or legislative facts. *Manufactured Housing Institute v. Pettersen*, 347 N.W.2d 238, 244 (Minn. 1984). The agency must show that a reasoned determination has been made. *Manufactured Housing Institute v. Pettersen*, 347 N.W.2d 238, 236 (Minn. 1984),

Department has stated that it will consider use of ASHRE-15 (1989 edition) when sufficient experience demonstrates its propriety. There is no showing by the Institute that the failure to incorporate by reference the additional documents it suggests affects the need for and reasonableness of the proposed rules. The Administrative Law Judge finds that the Department has established the need for and reasonableness of Part 5230.5010. If the Department, however, chooses to amend Part 5230.5010 by incorporating any of the additional technical documents attached to the Comments of the International Institute of Ammonia Refrigeration, dated June 10, 1992, it may do so without the amendment being considered a prohibited substantial change under Minn. Stat. 14.15, subd. 3 (1990).

16. Part 5230.5015 authorizes the Commissioner of the Department of Labor and Industry to convene an industry task force when substantial changes or modifications in nationally recognized standards for ammonia are promulgated by the appropriate professional bodies. Part 5230.5015 includes the word "may" when describing the authority of the Commissioner to appoint such a task force. The International Union of Operating Engineers, Local Union No. 70, in its Comments of June 9, 1992, p. 1, states that the use of the word "may" is inappropriate and should be changed to the word "shall". The Department, in its Reply Comments of June 12, 1992, p. 2, states that the Commissioner reserves "the right of discretion in the formation of ad hoc advisory bodies." Normally, unbridled discretion in an administrative agency with no governing standard makes a rule illegal under Minn. Stat. 14.02, subd. 4 (1990) in that such portions of the rule fails to make more specific a law enforced or administered by the agency. In this case, however, no right of any member of the public is adversely affected, if the Commissioner should fail to appoint an advisory committee. Moreover, it would be within the discretion of the Commissioner, even under the rule as proposed by the Union to determine whether a change in the national standard is "substantial". Since no right of any member of the public is affected by inclusion of the word "may" in Part 5230.5015, the part as proposed is found to be both needed and reasonable.

17. Part 5230.5020 includes 74 subparts in which words used in the rules with a unique meaning are defined. The definitions include two general types: technical terms that are standard to the ammonia refrigeration industry derived from the source documents identified on page one of the Statement of Need and Reasonableness and the Appendix attached thereto and nontechnical definitions which otherwise might be subject to varying interpretations by nonprofessional persons. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 5, argues that the technical definitions should be incorporated by reference from the ANSI/ASHRAE 15-78 and ANSI/IIAR 2-84 standards. The Institute also argues that the

definitions taken from the ANSI/ASHRAE 15-1978 standard are inappropriate since the source is an older edition of the standard than currently exists. The ANSI/ASHRAE 15-1978 standard has been replaced by a 1989 edition. The Institute argues that if adoption by reference of the 1989 standard does not occur, the definitions, insofar as they are taken from the ASHRAE 15 standard, should be taken from the 1989 edition of that standard. The Institute does not, however, note any significant variations between the definitions contained in the 1978 and the 1989 standards. In its Statement of Need and Reasonableness, p. 5, the Department states that the definitions contained in Part 5230.5020, to the extent that they relate to technical matters, are standard in the industry. In the absence of any showing by the Institute that



the 1978 and 1989 versions of ASHRAE-15 are markedly different or that the 1978 versions are now inappropriate, the Administrative Law Judge finds that, except as specifically stated in later Findings, the definitions contained in Part 5230.5020 are both needed and reasonable.

18. Subpart 42 of Part 5230.5020 defines a "machinery room, class T". The class T machinery room is a machinery room, as defined in subpart 41, that has the design specifications stated in items A - H of subpart 42. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 6, states that the definition of a "class T machinery room" has been deleted from ASHRAE or IIAR standards. It concludes that the term "class T" machinery room should be deleted from the rule. The Department, at page 6 of the Statement of Need and Reasonableness, states that a "class T" machinery room requires tighter standards than a general machinery room as defined in subpart 41 of the part. The definition requires a minimum fire separation from the rest of the building. It is necessary to assure safety of the general public who will be in the adjacent space by restricting the potential for transfer of ammonia from the machinery room to the occupied space- It is reasonable to assure the safety of the general public by eliminating the likelihood of a person's exposure to ammonia in the event of an accident. Except as stated in subsequent Findings, the definition of a "class T" machinery room contained in subpart 42 is found to be both needed and reasonable for the reasons stated at page 6, lines 39-45 of the Statement of Need and Reasonableness. To the extent that the term "class I" machinery room no longer exists in the national standards and to the extent that the Department wishes to employ a different term for that definition, it may change the term used without the amendment resulting in a prohibited substantial change within the meaning of Minn. Stat. 14 15, subd. 3 (1990). The Agency may, however, continue use of the phrase "class T" machinery room if it chooses to do so.

19. William V. Richards, Inc. in its Comments of June 9, 1992, p. I, argued that when sufficient ventilation is provided, electrical equipment for ammonia does not need to conform to the requirement of a hazardous location, as defined in class 1, division 2, of the Minnesota State Electrical Code.

That requirement is contained in subpart 42 H of this part, as initially proposed. The Department, in its amendments of June 8, 1992, attached hereto as Exhibit A, recognized the legitimacy of the comment and proposed to delete the second sentence of Part 5230.5020, subp. 42 H. Since the amendment does not go to a new subject matter or enlarge the application of the rule and is in response to a public comment made at the hearing, it does not constitute a prohibited substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990). As amended, therefore, subpart 42 of Part 5230.5020 is found to be both needed and reasonable.

20. Subpart 56 of Part 5230.5020 defines the term "Pressure vessel". This definition in this subpart is a technical term that is standard within the ammonia refrigeration industry. See, Statement of Need and Reasonableness, pp. 1, 5. The Operating Engineers, Local Union 70, in its Comments of June 9, 1992, p. 1, states that pressure vessels are regulated by the State Boiler Code and that high pressure piping inspectors are not qualified to inspect pressure vessels. The Agency, in its Reply Comments of June 12, 1992, p. 2, states that the rules do not allow high pressure piping personnel to perform the pressure vessel inspection required by the State Boiler Code. The Department recognizes that pressure vessels will be regulated by the Boiler

and Pressure Vessel Code administered by the Department of Labor and Industry. Since the definition contained in subpart 56 of this part is a recognized technical definition in the ammonia refrigerant industry and does not vary the responsibility of the Boiler Inspection Division of the Department of Labor and Industry under the statutes, it is found to be both needed and reasonable as proposed.

21. Subpart 64 of this part defines a shell and tube condenser and subpart 65 defines a shell and tube evaporator. As stated in the Statement of Need and Reasonableness, these are technical definitions taken from recognized industry standards. Local Union No. 70 of the Union of Operating Engineers, in its Comments of June 9, 1992, p. I., states that shell and tube condensers and shell and tube evaporators, as pressure vessels, are subject to inspection by the Boiler Inspection Division of the Department of Labor and Industry under the Boiler and Pressure Vessel Code pursuant to Minn. Stat. c. 183 (1990). The Agency, in its Reply Comments of June 12, 1992, p. 2, states that the definitions and the proposed rules in no way assign responsibility for inspection of shell and tube condensers and shell and tube evaporators. The authority for regulating the inspection of shell and tube condensers and shell and tube evaporators under the Boiler and Pressure Code remains with the Boiler Inspection Division of the Department of Labor and Industry. Subparts 64 and 65 of this part are found to be both needed and reasonable.

22 Part 5230.5025 specifies that only refrigerant grade ammonia may be used in ammonia refrigerant systems. It also provides that the maximum allowable concentration of ammonia in refrigeration system is 50 parts per million ambient. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 6, requests that the sentence stating the maximum allowable concentration of ammonia be deleted is a nongoverning OSHA standard. The Department, in its Statement of Need and Reasonableness, p. 7, states that it is both needed and reasonable to define requirements and standards for ammonia used in refrigerant systems. If unacceptable grades of ammonia within unacceptable levels of impurities are used, improper operations or unsafe conditions might result. The concentration level stated in Part 5230.5025 is found to be both needed and reasonable for the reasons stated by the Department at page 7 of the Statement of Need and Reasonableness.

23. The Union of Operating Engineers, in its Comments of June 9, 1992, p. 2, states that anhydrous ammonia is used for fertilizer and has no relationship to refrigeration. It concludes that the reference to anhydrous ammonia in Part 5230.5025 is improper. The Department, in its Reply Comments

of June 12, 1992, p. 2, states that anhydrous ammonia only refers to undiluted ammonia. The reference to anhydrous ammonia has nothing to do with the subject of fertilizer. It is appropriate, therefore, to disregard the comment of the Union of Operating Engineers, Local Union No. 70, relating to the propriety of the use of the term "refrigeration grade anhydrous ammonia".

24. Part 5230.5250 defines the types of locations that are governed by the rules, stated in terms of an "occupancy", that is, the type of use of the premises. The degree of protection afforded in each occupancy varies by the likelihood that persons unaccustomed to handling ammonia will come into contact with the system and its contents in the event of an accident or malfunction of the system. It is necessary to define the types of occupancies when determining the permissible quantities of ammonia and kinds of ammonia systems which may be used in each type of occupancy. The definitions of the

types of occupancy stated In Part 5230.5250 are found to be reasonable as being taken from the Uniform Building Code and standard source industry documents, as described in the Statement of Need and Reasonableness, pp. 1, 7. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 6, recommends that the text be deleted and that ASHRAE 15-89, section 3, be incorporated by reference. For the reasons stated in findings 10 and 15, supra, it is appropriate to disregard this comment of the International Institute of Ammonia Refrigeration.

25. Part 5230.5300 classifies refrigeration systems by type as a direct system, a double direct system, or an indirect system. These definitions and descriptions are taken from ASHRAE 15, 1978 edition. The Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, at p. 6 recommends that the text of this part be deleted and that ASHRAE 15-1989, section 4, be adopted by reference. For the reasons stated in Findings 10 and 15, supra, it is appropriate to disregard this comment of the Institute of Ammonia Refrigeration.

26. Part 5230.5350 states restrictions on the placing of ammonia piping, limitations on ammonia system sizing, and pressure relief venting requirements. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 6, recommends that the text be deleted and that ASHRAE 15-1989, section 6.2, et al., be substituted. For the reasons stated in Findings 10 and 15, supra, it is appropriate to disregard this comment of the Institute.

27. In its Statement of Need and Reasonableness, pp. 9-11, the Agency states the need for and reasonableness of Part 5230.5350. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 6, states that subpart 10, relating to maximum permissible ammonia quantities, should be revised to conform to the standards in the 1989 edition of ASHRAE 15, at section 6.4. A similar statement was made by William V. Richards, Inc., in its Comments of June 9, 1992, p. 1. The Department, in its Reply Comments, p. 4, states that it adopted the limits based on its review of the 1978 national standards and the practical effect of those standards on the potential exposure for persons who are untrained and unprotected from ammonia exposure in the case of an accident. To the extent that the experience under the new standard in other states justifies a relaxation of the rule by future amendment to implement a changed national standard, the Department will

consider such an amendment. Reply Comments of the Minnesota Department of Labor and Industry, June 12, 1992, p. 4. Since the Department has the statutory responsibility to adopt rules regarding public safety and the installation and operation of ammonia refrigerant systems, it is appropriate for it to rely on its experience under the 1978 standard. If future experience demonstrates that a relaxation of the standard is consistent with public safety, the Department has indicated a willingness to revise the rule.

28. Subpart IOC(5) of Part 5230.5350 requires that electrical components in the machinery room comply with the class 1, division 2 requirements of the Minnesota Electrical Code. Several commentators stated that this hazardous location requirement is inappropriate. See, Comments of International Union of Operating Engineers, Union Local No. 70, June 9, 1992, p. 2; Comments of Setter, Leach & Lindstrom, Inc., June 8, 1992, p. 1. In response to those comments, the Department proposed an amendment to Part 5230.5350, subp. IOC(5) as stated in Exhibit A, attached hereto. For the reasons stated in Finding 19,

supra, the amendment is found to be both needed and reasonable. Because the amendment does not go to a different subject matter and restricts the application of the rule in response to appropriate public comment, the amendment does not constitute a prohibited substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990). Part 5230.5350 is found to be needed and reasonable, as amended.

29. Part 5230.5400 states the requirements for ammonia systems in industrial occupancies, as previously defined. Subpart 3A of this part requires that the refrigerant storage area be considered a hazardous class I location according to the Minnesota State Electrical Code. A number of commentators, including the International Institute of Ammonia Refrigeration, the Operating Engineers Union, Local No. 70, and William V. Richards, Inc. argued that it is inappropriate to consider a refrigerant storage area as a hazardous class I location when requires ventilation is provided. In its proposed amendments, as contained in Exhibit A hereto, the Agency proposed to amend this subpart to require a classification by type of location consistent with the requirements of the Minnesota State Electrical Code rather than designation as a hazardous class I location. For the reasons stated in Finding 19, supra, the amendment is found to be both needed and reasonable and not a prohibited substantial change. Because the only adverse comments received on this part related to subpart 3A, and the need for and reasonableness of 5230.5400 is substantiated in the Statement of Need and Reasonableness, the part, as amended, is found to be both needed and reasonable.

30. Part 5230.5605 relates to air-cooled condensers that are applied to closed circuit ammonia refrigeration systems. This section is taken from IIAR-2, the national standard. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, at p. 7, states that the text should be deleted and IIAR-2-1984, section 3, incorporated by reference. For the reasons stated at Findings 10 and 15, supra, the comment of the International Institute of Ammonia Refrigeration may be disregarded. Part 5230.5605 is found to be both needed and reasonable.

31. Part 5230.5625 applies to shell and tube condensers used in ammonia closed circuit refrigeration systems. The Operating Engineers Union, Local No. 70, in its Comments of June 9, 1992, p. 2, states that shell and tube condensers are pressure vessels under State Boiler Code. In their Reply Comments of June 12, 1992, p. 2, the Agency rightly observes that the Union statement is correct but has no relationship to the proposed rules. It is appropriate to disregard the comment of the Union. Part 5230.5625 is found to be both needed and reasonable.

32. Part 5230.5655 applies to pressure relief devices installed on ammonia closed circuit refrigeration systems. The Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 7, states that section

5230.5655 through 5230.5675 should be deleted and IIAR2-1984, section 3.11, adopted by reference. For the reasons stated in Findings 10 and 15, supra, it is appropriate to disregard this comment by the International Institute. Part 5230.5655, which is based on a recognized national standard, is found to be both needed and reasonable.

33. Part 5230.5665 provides for pressure relief protection pressure in pressure vessels. The Operating Engineers Union Local Union 70, in its



Comments of June 9, 1992, p. 2, states that pressure vessel protection is regulated under the "Minnesota Boiler Code Statute and Rule 5225". The Agency, in its Reply Comments, does not dispute the statement by the Union but observes that the statement has no application to Part 5230.5665. It is appropriate to disregard this comment of the Union.

34. The International Institute, in its Comments of June 10, 1992, p. 10, states that there is an error in the equation contained in Part 5230.5665, subp. 12, as it relates to maximum discharge piping length. The equation is stated at line 33 of page 40 of the proposed rules. The Department, in its Reply Comments, did not respond to this comment. A comparison of ANSI/IIAR-2-84, section 3.11.4.13, attached to the Comments of the International Institute of Ammonia Refrigeration, dated June 10, 1992, shows that the portion of the formula which reads as follows:  $L = 7 \times 10^{-4} P D C_o$  should read as follows:  $L = 7 \times 10^{-4} P_i D / C$ . The formula is stated by the Department to be taken from ANSI/IIAR-2-84. Statement of Need and Reasonableness, p. 19. Since the Department relies upon the formula contained in ANSI/IIAR-2-1984, section 3.11.4.13 and a comparison of the original source shows an error by the Department in transcribing the formula, the Department has failed to establish the reasonableness of subpart 12 of Part 5230.5665.

35. To correct the defect, the Department must revise the formula contained at page 40, line 33 of the proposed rules to correspond exactly with ANSI/IIAR-2-1984, section 3.11.4.13. Since the required change only corrects an error by the Department and does not expand the application of the proposed rules, it is not a prohibited substantial change within the meaning of Minn. Stat. 14 15, subd. 3 (1990).

36. Part 5230.5675 relates to testing of the components of a system that contains a refrigerant. The part requires that the manufacturer test the component for tightness at the time of its manufacture for not less than the designed pressure for which the component is rated. The part further provides that an administrative authority may request documentation of such testing. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 7, states that, since the section is drawn primarily from IIAR-2-1984, sections 3.11 and 5.1, it should be deleted and the source material adopted by reference. For the reasons stated in Findings 10 and 15, supra, it is appropriate to disregard this comment of the Institute.

37. The Operating Engineers Union, Local 70, in its Comments of June 9, 1992, p. 2, argued that Part 5230.5675 contains no standard governing the exercise of discretion by the administrative authority. As noted in Finding 16, supra, generally, the grant of unrestricted discretion to an

administrative agency with no standard guiding the exercise of that discretion is inappropriate. Such unbridled discretion does not make specific the law administered by the agency, as required by Minn. Stat. 14.02, subd. 4 (1990). In this case, however, the Administrative Law Judge finds that this part is both needed and reasonable, as proposed. The part requires mandatorily that components be tested by the manufacturer. Testing of the components is not discretionary with the manufacturer or the administrative authority. Hence, the only additional burden placed upon the installer of the components is having available documentation of the testing that was previously done by the manufacturer. No additional burden or duty is imposed at the site of installation. Documentation of the testing would already exist. Under such circumstances, given the safety concerns of the Department,

it is appropriate to allow the administrative authority to decide whether it wishes to review documentation of the required testing. see, Reply Comments of the Department, June 12, 1992, p. 2.

38. Part 5230.5680 relates to construction material selection, including pipe valves fittings and accessories. In its Statement of Need and Reasonableness, p. 21, the Department substantiates the need for and reasonableness of this part, it is found to be both necessary and reasonable to delineate the materials that are suitable for ammonia service and that will not deteriorate under normal operating conditions. It is also found to be both needed and reasonable to provide direction for the usage of other materials acceptable for ammonia service. Properly designed and installed piping systems using appropriate materials are necessary for the safe containment of ammonia refrigerant and for the use of ammonia refrigerant. The minimum standards in this part are based on the national standard contained in IIAR 2-1984, section 5.1.3. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 7, argues that the part should be deleted and the underlying reference material contained in IIAR 2-1984, section 5.1.3 adopted by reference. For reasons previously stated in other findings, the Administrative Law Judge finds it appropriate to disregard this comment of the Institute.

39. Two other commentators stated that the portion of subpart 6 of Part 5230.5680 which requires the use of seamless pipe is inappropriate. Comments of Grand Metropolitan, June 8, 1992, p. 2; Comment of William V. Richards, Inc., June 9, 1992, p. 2. The comment of William V. Richards Inc. points out that seamless piping of A106 grade B exceeds the liquid line requirements of IIAR-2 and ASME B 31.5. The Department, in its Reply Comments of June 12, 1992, pp. 1, 4, states that it is appropriate to require the use of seamless pipes for ammonia liquid lines because the piping may be subject to significant changes in pressure if ammonia vaporizes. It is reasonable to require, in subpart 6 of this part, the use of seamless pipe of the grade specified for liquid lines because of the significant changes in pressure that may result in the pipe if the ammonia being carried vaporizes. Part 5230.5680 is found to be needed and reasonable.

40. Part 5230.5700 relates to building structure and machine room design. The Department documented the need for and reasonableness of this part in the Statement of Need and Reasonableness, pp. 22-23, Subparts 1-15 of this part are found to be both needed and reasonable to assure that the location housing ammonia equipment is safe for the equipment and for those who must be present in the room where the equipment is located. The only substantive negative comment on this part was advanced by the International Institute of Ammonia Refrigeration in its Comments of June 10, 1992, p. 7. The substance of that comment related to incorporation by reference of the

national standard from which this part was taken, IIAR 2-84, section 4.2.  
For

reasons previously stated, it is appropriate to disregard this comment of the Institute.

41. Part 5230.5710 relates to ventilation in machinery rooms. At the hearing, the Department proposed an amendment to subpart 3 B(1) which modifies the statement in the subpart that the "room must be considered a hazardous class I location according to the Minnesota State Electrical Code". The amendment removing the designation as a hazardous class I location is contained in Exhibit A attached hereto. For reasons previously discussed, it

is not appropriate to treat a machine room which has adequate ventilation as a hazardous class I location. Therefore, the amendment is found to be both needed and reasonable. Because the amendment does not expand the scope of the rule, result in a rule which is fundamentally different or increase any burden on persons subject to the rule, the amendment does not result in a substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990). As amended, Part 5230.5710 is found to be both needed and reasonable, See, Statement of Need and Reasonableness, pp. 23-24.

42. Part 5230.5915 relates to piping joints and includes a description of design standards, branch, run-outs, laterals, and saddles, the manner of welding of large joints, the maximum pressure service allowable and the assembly of components. Subpart I C of this part states that "Flanges must be a tongue and groove type rated at least 300 pounds per square inch and designed for ammonia service and system pressure." Grand Metropolitan, in its Comments of June 8, 1992, p. 1, states that past experience has proven that such a tongue and groove type flange with the rating stated is not necessary. William V. Richards, Inc., in its Comments of June 9, 1992, p. 2, also states that tongue and groove type flanges are not the only type of flange facings that are accepted in ASHME B 31.5 for ammonia. In its Reply Comments of June 12, 1992, pp. 1, 4, the Agency concludes that it is appropriate to disregard the negative comments because no data is provided to support the statements made. In its Statement of Need and Reasonableness, p. 25, the Department concludes that a tongue and groove flange, rated at 300 pounds per square inch, is the minimum material suitable for use with ammonia service. The subpart is found to be both needed and reasonable because very specific standards for piping joints must be specified to prevent failures and the escape of ammonia. The use of the materials specified in subpart 1C is also found to be both needed and reasonable for the safe containment of the ammonia refrigerant.

43. The only comment received on subpart 2 of Part 5230.5915 relates to the paragraph contained at page 53, lines 2-6 of the draft rules. At the hearing, in Dpt. Ex. N, Tr. 37, the Board proposed an amendment to what was termed Part 5230.5925, subp. 2. That citation appears to be inappropriate. The amendment reflected in Dpt. Ex. N and Exhibit A attached hereto which references Part 5230.5925, subp. 2, should reference Part 5230.5915, subp. 2, at lines 2-3 page 53 of the proposed rules. The amendment to Part 5230.5915, subp. 2, with the incorrect reference corrected, is found to be both needed and reasonable as appropriately reflecting the governing national standard, section 527.4.6 of ASHME B 31.5. Since the amendment merely corrects an

oversight by the Department without changing the application of the rule, the amendment does not result in a prohibited substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990).

44. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 7, argues that subpart 5 of Part 5230.5915 is excessive and burdensome in that it extends field piping requirements to factory constructed systems. This subpart is found to be both needed and reasonable to insure that work which is prefabricated in a shop is consistent with the requirements of these rules as well as work which is constructed on-site as field erection. Statement of Need and Reasonableness, p. 25. Part 5230.5915, as amended, is found to be both needed and reasonable.

45. Part 5230.5925 relates to welding on ammonia systems. With respect to subpart 2, which relates to the scope of the part, the Operating Engineers Local Union No. 70, in its Comments of June 9, 1992, p. 2, wishes to exclude from the part pressure vessels and inspection of pressure vessels. It is apparently the position of the Union that sole jurisdiction over pressure vessels is contained in the Minnesota Boiler Code and the Boiler Division of the Department of Labor and Industry. The Department, in its Reply Comments of June 12, 1992, p. 3, states that the rule is not intended to affect the requirement of inspection by the Boiler Inspection Division of the Department of Labor and Industry under the State Boiler Code. The rule cannot eliminate pressure vessel components from an inspection requirement under the proposed rules. All parts, including pressure vessels, must be inspected to ensure system safety. However, this part does not alter the inspection requirements by the Boiler Inspection Division. Subpart 2 is found to be both needed and reasonable as proposed.

46. Subpart 9 of Part 5230.5925 requires a certified welding procedure for each project. At the hearing herein, in Dpt. Ex. N, and in its later submission attached hereto as Exhibit A, the Department proposed to amend subpart 9 by adding the language stated in Exhibit A at the end of the subpart. The amendment is only for purposes of clarification. The added language merely states that no new procedure is required if the existing welding procedure has not changed and a new system must be installed. Tr. 35. This clarifying amendment does not affect the application of the rule and, in fact, relieves contractors from a significant amount of unnecessary filings. Subpart 9, as amended, is found to be both needed and reasonable. Since the amendment proposed to subpart 9 merely clarifies the existing rule and, actually, reduces any negative impact on contractors without affecting public safety, it does not result in a prohibited substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990).

47. At the hearing, the Agency proposed to amend subpart 16 of Part 5230.5925 by deleting at page 55, line 24 of the proposed rules the following: "and side bend". The reason for the amendment is to eliminate from this subpart an inappropriate interpretation of the underlying national standard. Tr. 36. Because the proposed amendment is only a clarifying amendment to eliminate a mistake in the rule as proposed and has no effect on the proper application of the rule, the amendment does not result in a

prohibited change within the meaning of Minn. Stat. 14.15, subd. 3 (1990).

Subpart 16, as amended, which merely reflects the accepted national standard, is found to be both needed and reasonable.

48. Subpart 17 of Part 5230.5925, as proposed, gave the administrative authority unlimited discretion to order the use of nondestructive testing of welds, including radiography. The rule further provided that the installing contractor would be responsible for the cost of the tests required. This rule varied from the national standard in that the performance of and responsibility for the cost of x-ray testing of welds is usually specified in the governing contract between the contractor and the owner. Unlimited discretion in the administrative authority to order x-ray testing at the expense of the contractor could result, potentially, in significantly increased cost to the contractor, not recovered in the contract price. See, e.g., Comments of the International Institute of Ammonia Refrigeration, June 10, 1992, p. 1; Comments of Carlson & Stewart Refrigeration, Inc., June 8, 1992, p. 1; Comments of William V. Richards, Inc., June 9, 1992, p. 2; Comments of Bassett



Mechanical, June 10, 1992, p. 1. The Administrative Law Judge, at the hearing, also questioned the Agency about the unlimited discretion of the administrative authority to require x-ray testing of welds at the expense of the contractor. Tr. 41-45. In response to the adverse public comments and the comment of the Administrative Law Judge, the Agency has proposed the following amendment to this subpart:

The administrative authority shall require the use of nondestructive testing including radiography or in specification of the welding of ammonia piping systems, Selection of nondestructive testing examination techniques shall be consistent with project design specifications, or with the requirements of Refrigeration Piping Code B31.5 whichever is more restrictive. Where a weld fails examination, it will be the responsibility of the installing contractor to replace, repair or prove the weld. The cost of nondestructive testing for labor and materials and all testing media shall be at the expense of the installing contractor.

See, Exhibit A, *infra*. The amendment by the Agency has removed the discretion of the administrative authority in requiring nondestructive testing. In all situations, some nondestructive testing is required. The types of nondestructive testing which can be used, however, include visual inspection, dye penetration examination, pressurization and, finally, radiography. Tr. 42-43. Under existing practice, the use of more costly x-ray examination and the responsibility for defraying the cost of such examination is specified in the contract specifications between the contractor and the owner. Refrigeration Piping Code B31.5 also contains specifications of circumstances under which nondestructive testing will occur. The rule, as amended by the Agency, is found to be both needed and reasonable. It allows the most restrictive specification, whether the construction contract or Refrigeration Piping Code B31.5, to determine what method of examination will be used. As previously noted, the types of nondestructive testing vary from visual inspection up to and through x-ray examination. The rule, as amended, really is consistent with existing practice under which the contractor can include in his bid price compensation for the level of sophisticated nondestructive testing that the owner wishes. The public is also protected by the requirements of Refrigeration Piping Code B31.5, if the contract specification does not exist or is less protective than the governing standard. Because the

amendment does not enlarge the application of the proposed rule over current practice, limits adverse impact on affected parties while protesting public safety and removes the unlimited discretion of the administrative authority, it does not result in a prohibited substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990).

49. Grand Metropolitan, in its Comments of June 8, 1992, states that subpart 18 of Part 5230.5925 is inappropriate because it requires a permit and full documentation even for repair welding. Grand Metropolitan observes that sometimes emergency repairs must be performed and waiting for a state permit could jeopardize life or property. In its Reply Comments, the Department states that the practice of the Department is and has been to recognize the need for emergency work. The Department would be satisfied if it is notified that repairs are undertaken and a permit requested at the time the work is

initiated. The Administrative Law Judge does not find that requiring repair welds to comply with the requirements of Part 5230.5925, realistically would jeopardize life or property, as suggested by Grand Metropolitan. To avoid ambiguity, however, the Agency could include in subpart 18 a statement to the effect that emergency repair welding may be commenced without a permit and full compliance with the rules as long as the Department is notified when the repair is commenced and a permit is requested at that time. Such a clarifying amendment would not result in a prohibited substantial change within the meaning of Minn, Stat. 14.15, subd. 3 (1990).

50. As a consequence of Findings 45-49, *supra*, the fact that other subparts of Part 5230.5925 did not receive adverse public comment and that the part is supported in the Statement of Need and Reasonableness, the Administrative Law Judge finds that Part 5235.5925, as amended, is both needed and reasonable.

51. Part 5230.5930 relates to stop valves and regulates the location, design, number and placement of such valves. The Agency discusses the need for and reasonableness of this part in its Statement of Need and Reasonableness, pp. 27-28. William V. Richards, Inc., in its Comments of June 9, 1992, p. 2, states that quarter-turn valves are widely used and accepted in ammonia systems as well as in ASME B31.5. Subpart 2 of Part 5230.5930 prohibits the use of quarter-turn valves. In its Reply Comments of June 12, 1992, p. 4, the Department states that it is its judgment that quarter-turn valves have a potential for creating an unsafe condition due to excess pressure hitting the line. It, therefore, believes that the use of such valves should be prohibited and slow action valves required instead. The Administrative Law Judge finds that Part 5230.5930 is needed and reasonable, including the part's prohibition of the use of quarter-turn valves for ammonia service due to the Department's conclusions about safety requirements.

52. Part 5230.5935 relates to miscellaneous materials that may be used in an ammonia installation. The Agency, in its Statement of Need and Reasonableness, p. 28, justifies the need for and reasonableness of this part. The only comment on the part was provided by Grand Metropolitan in its Comments of June 8, 1992, p. 2. Grand Metropolitan states that it is "uncalled for" to require documentation to install small lines to materials such as pressure gauges. The Agency, in its Reply Comments of June 12, 1992, p. 1, states that the comment of Grand Metropolitan must be disregarded because no explanation or supported documentation is provided for the company's observation. The Administrative Law Judge agrees with the Department of Labor and Industry. It is appropriate to disregard the comment for lack of specificity or supporting argument. The Administrative Law Judge finds that Part 5230.5930 is needed and reasonable as proposed.

53. Part 5230.5940 relates to piping hangers and supports, providing specifications and specifying components. The only public comment adverse to the part is contained in the statement of the International Institute of Ammonia Refrigeration, June 10, 1992, p. 7. The Institute suggests that the

underlying national standard, IIAR 2-1984, section 5.3 be substituted by reference for this part. For reasons previously discussed, the Administrative Law Judge believes it is appropriate to disregard this comment of the Institute. Part 5230.5940 is found to be needed and reasonable.

54. Part 5230.5945 relates to pressure relief protection devices, The only adverse comment received on this part is contained in the comments of the International Institute of Ammonia Refrigeration, June 10, 1992, p. 7. The Institute suggests that this part be deleted and the underlying national standard from which it was taken, IIAR 2-1984, section 5.4, be substituted. For reasons previously discussed, the Administrative Law Judge finds that this comment of the Institute should be disregarded. Part 5230.5945 is found to be both needed and reasonable.

55. Part 5230.6100 relates to system testing. The need for and reasonableness of Part 5230.6100 is discussed by the Agency in the Statement of Need and Reasonableness, pp. 30-31. The International Union of Operating Engineers, Local Union No. 70, in its Comments of June 9, 1992, p. 2, commented that subpart I should be limited to system testing and not continued system operation. The Union suggests that the phrase "system operation and" be removed from subpart 1. The Department, in its Reply Comments of June 12, 1992, p. 3, states that the Union's concern appears to be about the trade that should operate an ammonia system. The Department states that it has no intent to specify the trade that should operate such a system. The rule, as drafted, may be construed to place upon the initial contracting pipefitter some continuing responsibility to maintain the system, even in the absence of a maintenance contract. The Administrative law Judge does not believe that it is the intent of the rule that the contracting pipefitter who initially installed a system necessarily maintain under the rule a responsibility for the continued operation of the system. That intent could be clarified by inserting the word "initial" before the word "system" contained on line 10 of page 60 of the proposed rules. This part is, however, found to be both needed and reasonable without the amendment. If the Department decides to adopt this suggestion of the Administrative Law Judge, such an addition would not constitute a substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990), because it would merely clarify the intent of the subpart without expanding the application of the rule.

56. The International Union of Operating Engineers, Local Union No. 70, in their Comments of June 9, 1992, p. 2, also states that it is appropriate to recognize in subpart 3 of Part 5230.6100 that a commissioned pressure vessel inspector must be present for pressure vessel testing of the system under the pressure vessel portions of the State Boiler Code. As recognized by the Department in its Reply Comments of June 12, 1992, p. 3, the rule cannot and does not change the requirement for inspection of pressure vessels by the

Boiler and Pressure Vessel Division of the Department of Labor and Industry. The rule is independent of the Boiler Code and was not intended to have any effect on that code. It is appropriate, therefore, to disregard this comment by the Union.

57. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 8, states that Part 5230.6100 should be deleted and the reference to the underlying national standard contained in IIAR 2-84, section 5.6 adopted by reference. For reasons previously stated, the Administrative Law Judge finds it is appropriate to disregard this comment by the Institute.

58. Subpart 6 of part 5230.6100 provides that witnessed tests under this part may be witnessed by the administrative authority. As stated by the Union

of Operating Engineers and the Administrative Law Judge at the hearing, Tr. 45-46, it is not clear whether the administrative agency must receive notice of a test or whether it could require a retest if it were not notified that a test would occur in its absence. At the hearing, the Agency explained the intent of the subpart, Tr. 46. In its post-hearing filing containing amendments, attached hereto as Exhibit A, the Department amended this part by requiring at least one working day advance notice of a test to the administrative authority and requiring a declaration of test to be signed by the inspector, if he or she is present after notification. Subpart 6, as amended, is both needed and reasonable, since it allows the administrative authority to witness a test when it has a safety concern about the integrity of the system. It is reasonable to insure the additional documentation of observation by a third party, independent inspector when the authority has a legitimate safety concern. The provision for notice is both necessary and reasonable, so that the inspector may be present at the test, if the administrative authority wishes that to occur. Statement of Need and Reasonableness, p. 31; Tr. 46-47. Because the amendment proposed by the Department does not result in a rule that is fundamentally different, or expand the application of the rule to situations not previously covered, or impose additional burdens on members of the public, the amendment does not result in a prohibited substantial change within the meaning of Minn. Stat. 14.15, subd. 3 (1990). The Administrative Law Judge finds that Part 5230.6100, as amended, is needed and reasonable.

59. Part 5230.6115 relates to refrigerants. The need for and reasonableness of this part is stated in the Statement of Need and Reasonableness, pp. 31-32. The only comment received on this part was made by the International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 8. The Institute recommends deletion of this part and adoption by reference of the current national standard, ASHRAE 15-89, section 12. For reasons previously discussed, it is appropriate to disregard this comment by the Institute. The Administrative Law Judge finds that Part 5230.6115 is needed and reasonable.

60. Part 5230.6125 relates to the maintenance and operation of an ammonia system. The need for and reasonableness of this part is documented by the Agency in its Statement of Need and Reasonableness, p. 32. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 8, stated that subpart 2 and subpart 3 of this part duplicate EPA requirements under federal statutes. It is the recommendation of the Institute that only the emergency plans provided for by the Environmental Protection Agency be required. To the extent that subparts 2 and 3 relate to subjects similar to those required by the EPA, the EPA plan could be used, as long as the matters required by subparts 2 and 3 are also present. There is no evidence in the record that the requirements of subparts 2 and 3 of this part would in any way conflict with the documents required by EPA. The Agency states that the information required in subparts 2 and 3 is the minimum information and action plan that is appropriate to protect the public from ammonia in the event of a system failure. The Administrative Law Judge finds that Part 5230.6125 is both needed and reasonable.

61. The international Union of Operating Engineers, Local Union No. 70, in their Comments of June 9, 1992, states that a shutdown sign required by subpart 2 of Part 5230.6125, for a large plant, would have to be as big as a

billboard. The Agency correctly observes that the Union does not justify this



comment or provide any basis for it. It is, therefore, appropriate to disregard this comment by the Union.

62. Part 5230.6130 relates to a declaration of test, The need for and reasonableness of this part is stated at page 33 of the Statement of Need and Reasonableness. Testing and documentation is necessary and reasonable to verify the quality of the installation. The Union of Operating Engineers, Local Union No. 70, in their Comments of June 9, 1992, p. 3, states that the rule should require an inspector to be present at the test. The Department is sensitive to the interest of the International Union of Operating Engineers to have an inspector present for testing. The Administrative Law Judge finds it sufficient if the administrative authority receives notice of the testing at least one day in advance and decides whether it wishes to have an inspector present, based on particular concerns of public safety. The Administrative Law Judge finds that Part 5230.6130 is both needed and reasonable.

63. Part 5230.6200 relates to ammonia handling and storage. The need for and reasonableness of this part was stated by the Department at page 33 of the Statement of Need and Reasonableness. This part follows the requirements of IIAR 2 1984, section 5.7. The Administrative Law Judge finds this part is both needed and reasonable as reflective of an appropriate national standard. The International Institute of Ammonia Refrigeration, in its Comments of June 10, 1992, p. 8, argues that this part should be deleted and IIAR 2-1984, section 5.7 adopted by reference. For reasons previously discussed, the Administrative Law Judge finds it is appropriate to disregard this comment of the International Institute.

Based upon the foregoing Findings of Fact, the Administrative Law Judge makes the following:

#### CONCLUSIONS

1. The Department gave proper notice of the hearing in this matter.
2. The Department has fulfilled the procedural requirements of Minn. Stat. 14.14, subs. 1, 1a and 14.14, subd. 2, and all other procedural requirements of law or rule.
3. The Department has demonstrated its statutory authority to adopt the proposed rules and has fulfilled all other substantive requirements of law or

rule within the meaning of Minn. Stat. 14.05, subd. 1, 14.15, subd. 3 and 14.50 (i)(ii).

4. The Department has documented the need for and reasonableness of its proposed rules with an affirmative presentation of facts in the record within the meaning of Minn. Stat. 14.14, subd. 2 and 14.50 (iii), except as noted at Finding 34.

5. The amendments and additions to the proposed rules which were suggested by the Department after publication of the proposed rules in the State Register do not result in rules which are substantially different from the proposed rules as published in the State Register within the meaning of Minn. Stat. 14.15, subd. 3, and Minn. Rule 1400.1000, subp. 1 and 1400.1100.

6 . The Administrative Law Judge has suggested action to correct the defect cited in Conclusion 4 as noted at Finding 35,

7. Due to Conclusion 4, this Report has been submitted to the Chief Administrative Law Judge for his approval pursuant to Minn. Stat. 14.15, subd. 3.

8. Any Findings which might properly be termed Conclusions and any Conclusions which might properly be termed Findings are hereby adopted as such.

9. A finding or conclusion of need and reasonableness in regard to any particular rule subsection does not preclude and should not discourage the Department from further modification of the proposed rules based upon an examination of the public comments, provided that no substantial change is made from the proposed rules as originally published, and provided that the rule finally adopted is based upon facts appearing in this rule hearing record.

Based upon the foregoing Conclusions, the Administrative Law Judge makes the following:

#### RECOMMENDATION

It is hereby recommended that the proposed rules be adopted, except where specifically otherwise noted above.

Dated this            day of July, 1992.

PETER C . ERICKSON  
Administrative Law Judge

Reported: Court Reported, Transcript Prepared.

Janet Shaddix & Associates, Court Reporters  
9100 West Bloomington Freeway  
Bloomington, Minnesota 55431  
Telephone -- 612/888-7687